#### REMARKS

A Petition for Extension of Time is being concurrently filed with this Amendment. Thus, this Amendment is being timely filed.

Applicants respectfully request the Examiner to reconsider the present application in view of the foregoing amendments to the supplemental claims and the following remarks.

# Status of the Claims

Claims 23, 24, 26, 27, 30-32, 34, 35, 38, 39 and 41-58 are now pending in this application. Claims 23, 31, 39, 41, 44, 49 and 54 are independent.

In the present Amendment, claims 23, 31, 34, 39, 41 and 42 have been amended, and product claims 43-48 and method claims 49-58 have been added.

The higher fatty acids such as shellac in claims 23, 26, 31, 34, 39, 41 and 42 have been deleted. Support for the new claims is found in the existing claims, and in the present specification at, e.g., paragraphs [0010], [0014], [0015], [0023], etc. No new matter has been added with the changes to the claims.

Based upon the above considerations, entry of the present amendment is respectfully requested.

# Substance of the Interview

Applicants thank the Examiner for his time, helpfulness and courtesies extended to Applicants' representative during the Interview of September 28, 2010. The assistance of the Examiner in advancing prosecution of the present application is greatly appreciated. In compliance with M.P.E.P. § 713.04, Applicants submit the following remarks.

The Interview Summary form amply summarizes the discussions at the Interview, wherein a new Office Action has issued.

# Issues under 35 U.S.C. § 103(a)

Claims 23, 24, 26, 27, 30-32, 34, 35, 38, 39, 41 and 42 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over **Oniki** (WO 03/030851) in view of **Takeda '652** (U.S.

2001/0007652) as evidenced by Sharma et al. (Def. Sci. J., 1983). Applicants respectfully traverse.

# Claim 23, 24, 26, 30, 31, 32, 34, 35, 38, 39, 41, 42, 43

Oniki is cited as a primary reference, but lacks disclosure of at least the claimed component (B) (Office Action, page 4, first full paragraph). Thus, the Examiner cites Takeda as a secondary reference as teaching, e.g., shellac.

The obviousness inquiry is decided as a matter of law, based on four general factual inquiries as explained in *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966), and reaffirmed in *KSR Int'l, Inc. v. Teleflex, Inc.*, 550 U.S. 398, 406–07 (2007). Here, those *Graham* factors weigh in Applicants' favor, and a proper rationale has not been used to reject the disputed claims. Applicants maintain that the instant rejection is improper for reasons of record.

Also, regarding the *Graham* factor of ascertaining the differences between the prior art and the claims at issue, Applicants respectfully refer the Examiner to the claims as shown herein. In this regard, each of Oniki and Takeda, even when combined, fails to disclose and teach the substance (B) of the present invention. Furthermore, an important feature of the present invention is that substance (B) is used for preventing (A) the tooth whitening ingredient, which has penetrated into the enamel, from leaching out of the enamel, thereby allowing the tooth whitening effect to last longer. There is no teaching or suggestion of these effects of the present invention in the cited references of Oniki and Takeda. Thus, even if assuming for argument's sake that the skilled artisan combines the references, as further evidenced by Sharma et al., the present invention would still not be achieved.

Thus, reconsideration and withdrawal of this rejection are respectfully requested.

# Newly Added Claims 44-58

Applicants also respectfully submit that the new claims are patentably distinct from the cited combination of references for reasons of record. Applicants add the following.

Oniki discloses the method for making teeth look white. The method includes causing a tooth whitening ingredient to infiltrate into enamel, thereby changing the optical property (such Application No.: 10/584,192 Art Unit 1612 Reply to Office Action of October 01, 2010

as refractive index and reflectivity) of the enamel. The enamel looks apparently cloudy and whiter than original so that the treated teeth apparently look white.

The optical property of the enamel in Oniki is through the changing of color of the enamel itself to white by an <u>irregular reflection</u>. The measurement method described in Oniki measures color of enamel itself. Such a method utilizes the natural law that color of an object changes to white when the wavelength of all of light reflects irregularly.

The other reference of Takeda teaches a different method of whitening. Takeda is cited as disclosing shellac. However, shellac covers the surface of the teeth, thereby smoothing the surface thereof, wherein <u>irregular reflection of light is prevented</u>. Thus, good gloss, brightness and luster can be imparted to the teeth (see page 3, paragraph [0054] in Takeda).

Even though Oniki and Takeda disclose a method for making teeth look white, Oniki uses <u>irregular reflection</u>, whereas Takeda uses <u>regular reflection</u>. Takeda's tooth whitening action is completely opposite of Oniki's method. Combining known prior art elements is not sufficient to render the claimed invention obvious if the results would not have been predictable to one of ordinary skill in the art. *United States v. Adams*, 383 U.S. 39, 51-52, 148 USPQ 479, 483-84 (1966); see also M.P.E.P. § 2143. The skilled artisan would not combine the references in order to achieve the present invention.

Also, those skilled in the art would not have the proper rationale or would have been motivated to combine the references which disclose completely opposite reflections and methods of whitening. Applicants note that in finding a reasonable expectation of success, at least some degree of predictability is required. *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976). Here, that degree of predictability is missing when opposite means of whitening are disclosed.

And again, an important feature of the present invention is that (B) is used for preventing (A) the tooth whitening ingredient, which has penetrated into the enamel, from leaching out of the enamel, thereby allowing the tooth whitening effect to last longer. Here, Oniki and Takeda fail to disclose and teach above the important feature of the present invention. Those skilled in the art would not have the proper rationale or would have been motivated to incorporate shellac into composition of Oniki to obtain teeth look white. As stated in KSR Int'l, 82 USPQ2d at 1397, hindsight bias and ex post reasoning are inappropriate in determining obviousness.

Application No.: 10/584,192 Docket No.: 0171-1287PUS1
Art Unit 1612 Page 18 of 19

Reply to Office Action of October 01, 2010

Accordingly, the subject matter and the effect of the present invention are not expected from the cited references even if Oniki and Takeda are combined.

All Evidence of Record Must Be Considered Anew

Applicants note that after a *prima facie* case of obviousness has been made (Applicants are not conceding this point) and rebuttal evidence submitted, all the evidence must be considered <u>anew</u>. *In re Eli Lilly & Co.*, 902 F.2d 943, 945, 14 USPQ2d 1741, 1743 (Fed. Cir. 1990) (citing *In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984)). In this

regard, reconsideration of the previously submitted declaratory is respectfully requested in light

of the new set of claims

Conclusion

It is believed that a full and complete response has been previously made to the outstanding Office Action, and as such, the present application is in condition for allowance.

Should there by an outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Eugene T. Perez, Registration No. 48,501, at the telephone number of the undersigned below to conduct an interview in an effort to expedite

prosecution in connection with the present application.

Docket No.: 0171-1287PUS1 Page 19 of 19

Application No.: 10/584,192 Art Unit 1612 Reply to Office Action of October 01, 2010

If necessary, the Director is hereby authorized in this, concurrent, and future replies to charge any fees required during the pendency of the above-identified application or credit any overpayment to Deposit Account No. 02-2448.

Dated: February 1, 2011

Respectfully submitted,

Eugene T. Perez

Registration No.: 48501

BIRCH, STEWART, KOLASCH & BIRCH, LLP 8110 Gatehouse Road, Suite 100 East

P.O. Box 747

Falls Chureh, VA 22040-0747

703-205-8000